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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,059	03/02/2000	Douglas Streeter Daudelin	2925-322P	4432

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EXAMINER

GARY, ERIKA A

ART UNIT PAPER NUMBER

2681

DATE MAILED: 08/03/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/517,059

Applicant(s)

DAUDELIN ET AL.

Examiner

Erika A. Gary

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on May 20, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 4-17 and 23-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ploeg et al., US Patent Number 5,711,000 (hereinafter Ploeg).

Regarding claim 1, Ploeg discloses a method for monitoring whether a subscriber station is operating in an authorized area of the subscriber station, the method comprising: monitoring an operational composite fingerprint for the subscriber station; and comparing the operational composite fingerprint to a characteristic composite fingerprint for the subscriber station to determine if the subscriber station is operating within the authorized area; the characteristic composite fingerprint being associated with the authorized area [col. 3: lines 7-13; col. 5: lines 5-21].

What Ploeg does not specifically disclose is that the subscriber station is a mobile subscriber station. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method in a mobile subscriber station as Ploeg's subscriber station (cordless fixed part) and a mobile subscriber station both have transceiver functionality. Either a fixed station or a mobile station can generate the composite fingerprints, as only transceiver functionality is required to do so.

Art Unit: 2681

Regarding claim 2, Ploeg discloses prior to the comparing step, the step of defining the characteristic composite fingerprint for the subscriber station associated with operating in an authorized area [col. 3: lines 7-13; col. 5: lines 5-21].

Regarding claim 18, Ploeg discloses a system for monitoring whether a subscriber station is operating in an authorized area of the subscriber station, comprising: a monitor for monitoring an operational composite fingerprint for the subscriber station; and a processor for comparing the operational composite fingerprint to a characteristic composite fingerprint for a subscriber station to determine if the subscriber station is operating in an authorized area; the characteristic composite fingerprint being associated it the authorized area [col. 3: lines 7-13; col. 5: lines 5-21].

What Ploeg does not specifically disclose is that the subscriber station is a mobile subscriber station. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method in a mobile subscriber station as Ploeg's cordless fixed part (subscriber station) and a mobile subscriber station both have transceiver functionality. Either a fixed station or a mobile station can generate the composite fingerprints, as only transceiver functionality is required to do so.

Regarding claim 19, Ploeg discloses a storage device for storing the characteristic composite fingerprint for a subscriber station associated with operating in an authorized area [col. 3: lines 7-13; col. 5: lines 5-21].

Art Unit: 2681

3. Claims 3, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ploeg in view of Hilsenrath et al., US Patent Number 6,026,304.

Claim 3 depends on claim 2; claims 20-22 depend on claim 18. As discussed above, Ploeg teaches the limitations of claims 2 and 19.

Regarding claim 3, Hilsenrath suggests the defining step comprises organizing a first histogram of observations of propagational delays associated with a reverse link transmission of the subscriber station from the authorized area [col. 7: line 66 – col. 8: line 14].

Regarding claim 20, Hilsenrath discloses an antenna monitor for monitoring the number of temporally offset receive signals, originating from a transmission of the subscriber station, incident upon each distinct uplink antenna set of a base station [fig. 4: ref. 76; col. 6: lines 12-23].

Regarding claim 21, Hilsenrath discloses the monitor comprises a propagational delay measurer for measuring the propagational delays of temporally offset receive signals originating from a transmission of the subscriber station [col. 4: lines 48-50; col. 7: line 66 – col. 8: line 4].

Regarding claim 22, Hilsenrath suggests the characteristic composite fingerprint includes a first histogram of observations of propagational delays associated with a reverse link transmission of the subscriber station from the authorized area [col. 7: line 66 – col. 8: line 14].

Ploeg and Hilsenrath are combinable because they are from the same field of endeavor, that is, monitoring subscriber station location. At the time of the invention, it

Art Unit: 2681

would have been obvious to one of ordinary skill in the art to modify Ploeg to include Hilsenrath. The motivation for this combination, as suggested by Hilsenrath, would have been to incorporate Hilsenrath's techniques to resolve ambiguities in location [col. 8: lines 5-6].

***Allowable Subject Matter***

4. Claims 4-17 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 4-6, and 23-25, prior art does not suggest or render obvious defining a characteristic composite fingerprint comprising organizing histograms of antenna observations per antenna set, organizing a probability density function, or grouping propagational delay factors based on pseudo-random codes. Regarding claims 7-11, prior art does not suggest or render obvious incrementing antenna set counters and counter bins associated with corresponding observations in a first histogram of propagational delays and in a second histogram of antenna observations. Regarding claims 12-15, prior art does not suggest or render obvious determining whether a histogram of propagational delay factors fall within a propagational delay mask; and determining whether a histogram of measured observations of antenna sets fall within an antenna mask. Regarding claims 16 and 17, prior art does not suggest or render obvious determining if a second statistical representation exceeds a maximum outside prominent characteristic of measured observations of propagational delays.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 703-308-0123. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

Art Unit: 2681

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750 or to the 2600 Customer Service Office at 703-306-0377.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive Arlington, VA., Sixth Floor (Receptionist).

EAG  
August 2, 2004



ERIKA GARY  
PATENT EXAMINER